

## EMERGENCY INTERIOR LIGHTING BATTERY BACKUP DIAGRAM

1 PANEL RELAY SCHEDULE - LCP

Relay Line Feed Type Voltage Source Description
2 1-4 NC 120V Normal Waiting 104

 12
 2-4
 NC
 120V
 Normal
 Reception Downlights 206

 14
 3-2
 NC
 120V
 Normal
 Corridors C31

 16
 NC
 120V
 Normal
 Spare

Normal Waiting 104
Normal Corridors C12,C13,C14

Normal Exterior Building Lights
Normal Reception 206

Normal Stairs ST12

Location: Storage Room 113

NEMA Rating: 1

Supply Circuit: 1-16 Voltage: 120

RelayLineFeedTypeVoltageSourceDescription11-4NC120VNormalReception1

Normal Reception 106

Normal Waiting 204

Part #: LIGHTING CONTROL SYSTEM MANUFACTURER LIGHTING CONTROL & DESIGN: GR1416LT/16 DTC-HL-SM OR EQUAL

13 2-5 NC 120V Normal Corridors C21,C22,C23,C24
15 1-14 NC 120V Normal Exterior Ground Lights

Enclosure Dimensions: 17.1"[434mm]H x 10.6"[269mm]W x 2.9"[74mm]D

SCALE: NONE

Location: Waiting 104 Part #: CH-4-IV-ST ENGRAVING ENGRAVING Color Line 1 Line 2

Ivory WAITING On/Off

Ivory RECEPT DESK On/Off

Ivory DOWNLIGHTS On/Off

Ivory DOWNLIGHTS On/Off Function Relay Controlled
Toggle LCP-1
Toggle LCP-2
Toggle LCP-3
Toggle LCP-1 2 3 Toggle LCP-Ivory ALL OFF SWITCH SCHEDULE - LV1 ID: LV2-A, LV2-B, LV2-C Location: Corridor C12, C13, C14 Part #: CH-1-IV-ST ENGRAVING ENGRAVING | Color | Line 1 | Line 2 | Ivory | CORRIDORS | On/Off Function Relay Controlled
Toggle LCP-4 \* CONTROLS NORMAL AND EMERGENCY LIGHT FIXTURES. SWITCH SCHEDULE - LV2-A, LV2-B, LV2-C Location: STAIRS ST12, ST22, ST32 ID: LV3-A, LV3-B, LV3-C Part #: CH-4-IV-ST ENGRAVING ENGRAVING 
 Color
 Line 1
 Line 2

 Ivory
 LOBBY
 On/Off

 Ivory
 SCONCES
 On/Off

 Ivory
 STAIRS
 On/Off

 Ivory
 ALL OFF
 ButtonNameFunctionRelay Controlled1BUTTON 1ToggleLCP-52BUTTON 2ToggleLCP-63BUTTON 3ToggleLCP-74BUTTON 4ToggleLCP-5,6,7 \* CONTROLS NORMAL AND EMERGENCY LIGHT FIXTURES. SWITCH SCHEDULE - LV3-A, LV3-B, LV3-C Location: Reception 204 Part #: CH-4-IV-ST Color Line 1 Line 2

Ivory WAITING On/Off

Ivory RECEPT DESK On/Off

Ivory DOWNLIGHTS On/Off

Ivory ALL OFF Function Relay Controlled
Toggle LCP-10
Toggle LCP-11 Toggle LCP-Toggle LCP-SWITCH SCHEDULE - LV4 Location: Corridor C21,C22,C23 ID: LV5-A, LV5-B, LV5-C Part #: CH-1-IV-ST | Color | Line 1 | Line 2 | Ivory | CORRIDORS | On/Off ButtonNameFunctionRelay Controlled1BUTTON 1ToggleLCP-13 \* CONTROLS NORMAL AND EMERGENCY LIGHT FIXTURES. SWITCH SCHEDULE - LV5-A, LV5-B, LV5-C ID: LV6-A, LV6-B Location: Corridor C31 Part #: CH-1-IV-ST ENGRAVING ENGRAVING Function Relay Controlled
Toggle LCP-14 | Color | Line 1 | Line 2 | Ivory | CORRIDOR | On/Off \* CONTROLS NORMAL AND EMERGENCY LIGHT FIXTURES. SWITCH SCHEDULE - LV6 **SWITCH SCHEDULES** 

APPROVED: SERVICE DIRECTOR

LIGHTING CONTROL SYSTEM SPECIFICATION:

LIGHTING CONTROL SYSTEM SHALL BE DIGITAL AND CONSIST OF A MASTER LCP WITH UP TO 16 INDIVIDUAL RELAYS. ANALOG SYSTEMS ARE NOT ACCEPTABLE. ALL CABLES SUPPLIED BY CONTRACTOR.

2. RELAY PANELS SHALL BE PRE-WIRED, PRE-ASSEMBLED, PREPROGRAMMED AND LISTED TO UL 916 (NORMAL). PANELS SHALL BE PROVIDED WITH DUAL VOLTAGE POWER

3. RELAYS SHALL BE ZERO-CROSS TYPE. NO EXCEPTIONS. RATED

FOR 120/277V 20A TUNGSTEN, BALLAST OR HID. STANDARD STANDARD RELAYS SHALL HAVE NORMALLY CLOSED (NC) CONTACTS 4. RELAY PANEL ELECTRONICS SHALL PROVIDE CURRENT VISUAL STATUS

AND CONTROL OF EACH RELAY OR ZONE. ALL SYSTEM CONTROL ELECTRONICS SHALL STORE PROGRAMMING IN A NON-VOLATILE MEMORY AND PROVIDE 10 YEAR BATTERY BACK UP FOR TIME OF DAY. 5. LIGHTING CONTROL SYSTEM SHALL CONSIST OF MASTER PANEL CONTROLLED BY A 32-CHANNEL DIGITAL TIME CLOCK (DTC) THAT CONTROLS AND PROGRAMS THE ENTIRE LIGHTING CONTROL SYSTEM.

THE DTC SHALL SUPPLY ALL TIME FUNCTIONS AND ACCEPT OTHER

INPUTS. THE DTC SHALL ACCEPT CONTROL LOCALLY USING BUILT IN BUTTON PROMPTS AND USE OF AN 8 LINE 21-LETTER DISPLAY, FROM A COMPUTER, MODEM, ETHERNET OR INTERNET. ALL COMMANDS SHALL BE IN PLAIN ENGLISH. HELP PAGES SHALL DISPLAY ON THE DTC . ALL SWITCHES SHALL COMMUNICATE VIA RS 485, CAT 5 PATCH CABLE WITH RJ45 CONNECTORS. CONTACT CLOSURE STYLE SWITCHES ARE NOT ACCEPTABLE. ANY SWITCH BUTTON FUNCTION SHALL BE ABLE TO BE

ETHERNET OR INTERNET. REFER TO LIGHTING CONTROLS LOW VOLTAGE SINGLE LINE DIAGRAM FOR WIRING DETAILS. SWITCHES WHICH CANNOT BE PROGRAMMED REMOTELY SHALL NOT BE ACCEPTABLE. '. LIGHTING CONTROL SYSTEM INTERFACES TO INCLUDE A DRY CONTACT INPUT INTERFACE, BMS INTERFACE, AND ETHERNET/INTERNET INTERFACE.

VERIFY AND INSTALL ONLY THOSE INTERFACES INDICATED ON THE

CHANGED LOCALLY (AT THE DTC OR A PC) OR REMOTELY, VIA MODEM,

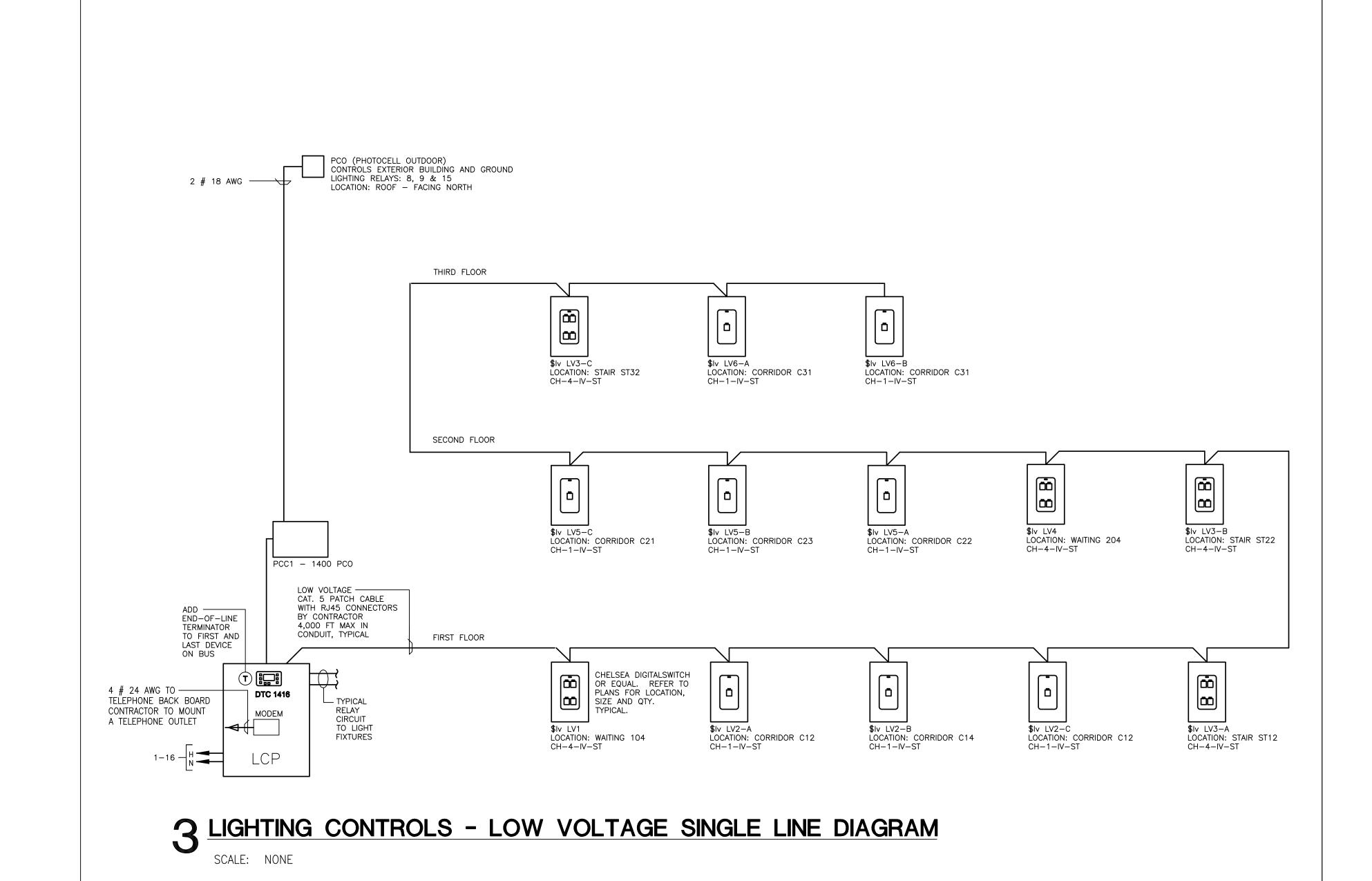
8. STANDARD LIGHTING CONTROL SYSTEM SOFTWARE, PRE-INSTALLED INTO THE DTC, SHALL CONSIST OF AND USE STANDARD GRAPHICAL MANAGEMENT SOFTWARE (GMS) PAGES. GMS SOFTWARE SHALL PROVIDE VIA LOCAL OR REMOTE PC A VISUAL REPRESENTATION OF EACH DEVICE ON THE BUS, SHOW REAL TIME STATUS AND THE ABILITY TO CHANGE THE STATUS OF ANY INDIVIDUAL DEVICE, RELAY OR ZONE. OPTIONAL SOFTWARE THAT ACCEPTS JOB SPECIFIC GRAPHICS SHALL BE AVAILABLE. NO EXCEPTIONS.

9. START UP: ELECTRICAL CONTRACTOR SHALL CONTACT EQUIPMENT MANUFACTURER AT LEAST 7 DAYS BEFORE TURNOVER OF PROJECT. EQUIPMENT MANUFACTURER SHALL REMOTELY DIAL INTO THE LIGHTING CONTROL SYSTEM, RUN DIAGNOSTICS AND CONFIRM SYSTEM PROGRAMMING. ELECTRICAL CONTRACTOR SHALL BE AVAILABLE A THE TIME OF DIAL IN TO PERFORM ANY CORRECTIONS REQUIRED. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH GENERAL CONTRACTOR AND THE OWNER, THE INSTALLATION OF A DEDICATED TELEPHONE LINE OR A SHARED PHONE LINE WITH A/B SWITCH. PHONE JACK TO BE MOUNTED WITHIN 12" OF MASTER LCP. LABEL JACK WITH PHONE NUMBER. ELECTRICAL CONTRACTOR SHALL CONNECT PHONE LINE FROM JACK TO MASTER LCP. NO EXCEPTIONS.

). TELEPHONE FACTORY DIAL-UP SUPPORT SHALL BE AVAILABLE AT NO ADDITIONAL COST TO THE ELECTRICAL CONTRACTOR OR OWNER BOTH DURING AND AFTER THE 3 YEAR WARRANTY PERIOD. FACTORY TO PREPROGRAM THE LIGHTING CONTROL SYSTEM PER PLANS AND APPROVED SUBMITTAL. THE LIGHTING CONTROL MANUFACTURER, AT NO ADDED COST, SHALL PROVIDE ADDITIONAL PROGRAMMING VIA MODEM AS REQUIRED BY THE ELECTRICAL CONTRACTOR OR OWNER FOR THE OPERATIONAL LIFE OF THE SYSTEM. MANUFACTURER WARRANTS THAT THE DTC SOFTWARE CAN BE UPGRADED AND MONITORED REMOTELY. NO EXCEPTIONS.

. SHOP DRAWINGS: SUBMIT DIMENSIONED DRAWINGS OF LIGHTING CONTROL SYSTEM AND ACCESSORIES INCLUDING, BUT NOT NECESSARILY LIMITED TO, RELAY PANELS, SWITCHES, DTC, PHOTOCELLS AND OTHER INTERFACES. DRAWINGS SHALL INDICATE EXACT LOCATION AND PROGRAMMING OF EACH DEVICE. INDICATE ALL TIME SCHEDULES AND SWITCH BUTTON ENGRAVING.

2. LIGHTING CONTROL SYSTEM SPECIFIED IS BASED ON LIGHTING CONTROL & DESIGN (LC&D), LOS ANGELES, CA (800) 345-4448. LIGHTING CONTROL SYSTEM SHALL MEET OR EXCEED LC&D SYSTEM



95% SUBMISSION

REVISIONS

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VAMC LIGHTING CONTROLS BUILDING 33 APPROVED: DIVISION CHIEF BUILDING NUMBER AKD

531-10-114 CRP

BOISE, IDAHO

